

Fig. 1A (Prior Art)

Example message generated by User A1's local mail program

140 { Date: Mon, 27 Nov 00 10:18:52 ~ 141  
From: "Alan Smith" <a1@abc.com> ~ 142  
To: x1@xyz.com, a2 ~ (4)  
Subject: Test Message ~ 144  
150 { This message is a test. The end.

**Figure 1B (Prior Art)**

Example message as modified by local computing device 100 Sendmail program

From a1@abc.com Mon Nov 27 10:19:23 2000 ~ 145  
Message-Id: <9631121611.AA02124@abc.com> ~ 146  
Date: Mon, 27 Nov 00 10:18:52  
From: "Alan Smith" <a1@abc.com>  
To: x1@xyz.com, a2  
Subject: Test Message

This message is a test. The end.

**Figure 1C (Prior Art)**

Example message as modified by remote computing device 130 Sendmail program

147 { From a1@abc.com Mon Nov 27 10:19:23 2000  
Received: from abc.com [216.122.95.01] by xyz.com (8.8.4/8.8.4) with ESMTP id BF02C24;  
Mon, 27 Nov 2000 10:21:46  
Message-Id: <9631121611.AA02124@abc.com>  
Date: Mon, 27 Nov 00 10:18:52  
From: "Alan Smith" <a1@abc.com>  
To: x1@xyz.com, a2  
Subject: Test Message

This message is a test. The end.

**Figure 1D (Prior Art)**

Example SMTP exchange as computing device 100 Sendmail connects to computing device 130 Sendmail

```

220-xyz.com Sendmail 8.6.12/8.5 ready at Mon, 27 Nov 2000
10:22:23 -0800
220 ESMTP spoken here
>>> EHLO abc.com
250-xyz.com Hello abc.com, pleased to meet you
250-EXPN
250-SIZE
250 HELP
>>> MAIL From:<a1@abc.com>
250 <a1@abc.com>... Sender ok
>>> RCPT To:<x1@xyz.com>
250 <x1@xyz.com>... Recipient ok
>>> DATA
354 Enter mail, end with "." on a line by itself
{The message illustrated in Figure 1C is transmitted}
>>> .
250 GAA20115 Message accepted for delivery
x1@xyz.com... Sent (GAA20115 Message accepted for delivery)
Closing connection to xyz.com
>>> QUIT
221 xyz.com closing connection

```

**Figure 1E (Prior Art)**

Error file

Host abc.com claimed to be bcd.com

**Figure 2E**

Example SMTP exchange as virtual computing device 200 Sendmail connects to computing device 130 Sendmail

```

220-xyz.com Sendmail 8.6.12/8.5 ready at Mon, 27 Nov 2000
10:22:23 -0800
220 ESMTP spoken here
>>> EHLO bcd.com
250-xyz.com Hello bcd.com (abc.com), pleased to meet you
250-EXPN
250-SIZE
250 HELP
>>> MAIL From:<b1@bcd.com>
250 <b1@bcd.com>... Sender ok
>>> RCPT To:<x1@xyz.com>
250 <x1@xyz.com>... Recipient ok
>>> DATA
354 Enter mail, end with "." on a line by itself
{The message illustrated in Figure 2C is transmitted}
>>> .
250 GAA20115 Message accepted for delivery
x1@xyz.com... Sent (GAA20115 Message accepted for delivery)
Closing connection to xyz.com
>>> QUIT
221 xyz.com closing connection

```

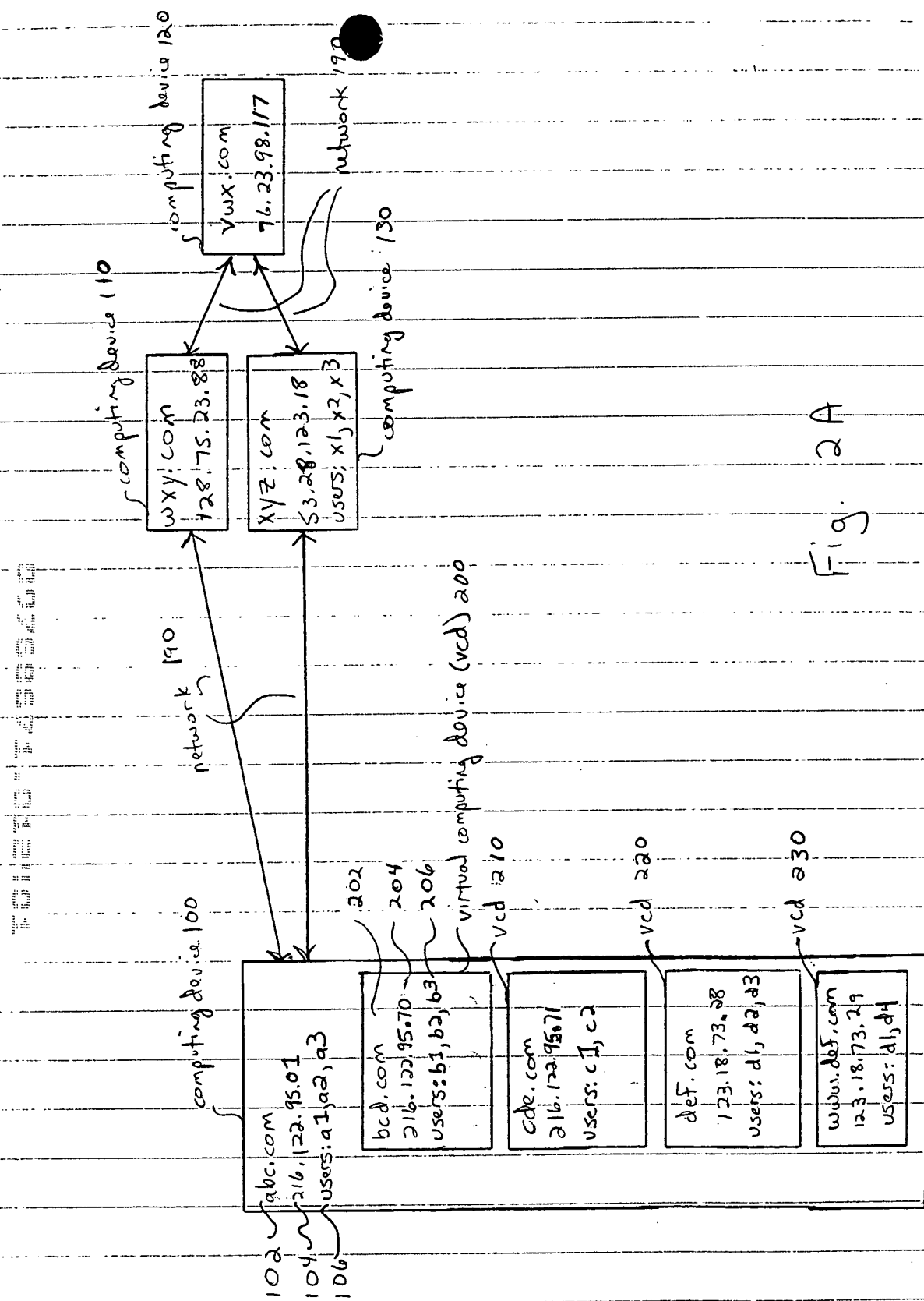


Fig. 2A

Example message generated by User B1's local mail program

Date: Mon, 27 Nov 00 10:18:52  
From: "Bob Smith" <b1@bcd.com> ~ 242  
To: x1@xyz.com, b2  
Subject: Test Message 2

This message is a test. The end.

**Figure 2B**

Example message as modified by virtual computing device 200 Sendmail program

From b1@bcd.com Mon Nov 27 10:19:23 2000 ~ 245  
Message-Id: <3431121623.4B0213D@bcd.com> ~ 246  
Date: Mon, 27 Nov 00 10:18:52  
From: "Bob Smith" <b1@bcd.com>  
To: x1@xyz.com, b2  
Subject: Test Message 2

This message is a test. The end.

**Figure 2C**

Example message as modified by remote computing device 130 Sendmail program

From b1@bcd.com Mon Nov 27 10:19:23 2000  
247 ~ Received: from abc.com [216.122.95.01] by xyz.com (8.8.4/8.8.4) with ESMTP id CD0A224;  
Mon, 27 Nov 2000 10:21:46  
Message-Id: <3431121623.4B0213D@bcd.com>  
Date: Mon, 27 Nov 00 10:18:52  
From: "Bob Smith" <b1@bcd.com>  
To: x1@xyz.com., b2  
Subject: Test Message 2

This message is a test. The end.

**Figure 2D**

Example message as modified by remote computing device 130 Sendmail program  
when sent by Virtual Domain Sendmail program on computing device 100

From b1@bcd.com Mon Nov 27 10:19:23 2000  
347 ✓ Received: from bcd.com [216.122.95.70] by xyz.com (8.8.4/8.8.4) with ESMTP id CD0A224;  
Mon, 27 Nov 2000 10:21:46  
Message-Id: <3431121623.4B0213D@bcd.com>  
Date: Mon, 27 Nov 00 10:18:52  
From: "Bob Smith" <b1@bcd.com>  
To: x1@xyz.com., b2  
Subject: Test Message 2

This message is a test. The end.

**Figure 3A**

Example SMTP exchange as Virtual Domain Sendmail program on computing device 100  
connects to computing device 130

220-xyz.com Sendmail 8.6.12/8.5 ready at Mon, 27 Nov 2000 10:22:23 -0800  
220 ESMTP spoken here  
361 ✓ >>> EHLO bcd.com  
362 ✓ 250-xyz.com Hello bcd.com, pleased to meet you  
250-EXPN  
250-SIZE  
250 HELP  
>>> MAIL From:<b1@bcd.com>  
250 <b1@bcd.com>... Sender ok  
>>> RCPT To:<x1@xyz.com>  
250 <x1@xyz.com>... Recipient ok  
>>> DATA  
354 Enter mail, end with "." on a line by itself  
{The message illustrated in Figure 2C is transmitted}  
>>> .  
250 GAA20115 Message accepted for delivery  
x1@xyz.com... Sent (GAA20115 Message accepted for delivery)  
Closing connection to xyz.com  
>>> QUIT  
221 xyz.com closing connection

**Figure 3B**

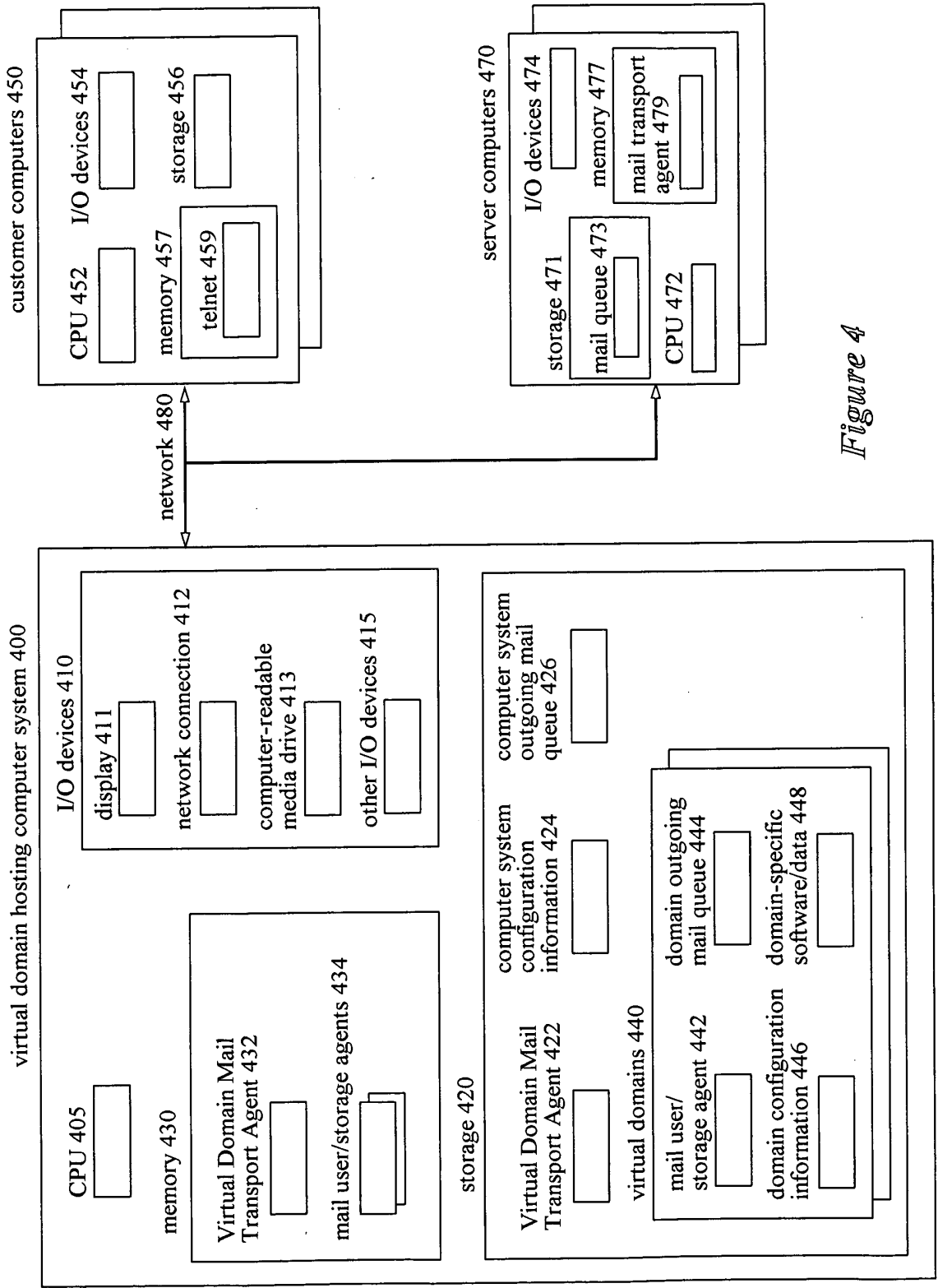
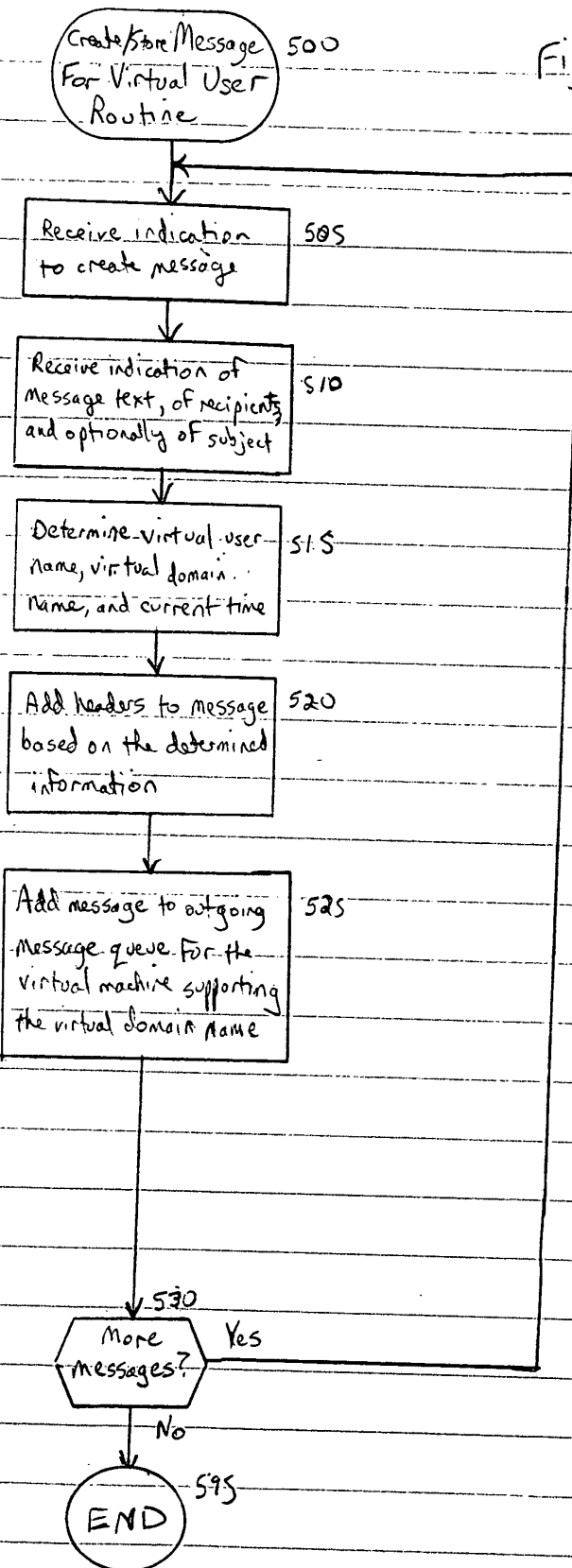


Figure 4

Fig. 5





Send Messages  
For Virtual User  
Routine

Fig. 6

